

**DESCRIPTION**

Under this work the CONTRACTOR shall furnish and install steel grating for bridge deck and sidewalk deck where indicated on the plans. Work shall comply with the provisions of Section 596 of the 1995 NYSDOT Standard Specifications for Construction and Materials, with all current modifications and Engineering Instructions, unless modified herein.

**MATERIALS**

Grating type references in this specification refer to IKG Greulich Bridge Flooring Systems.

Substitutions will be approved by the ENGINEER only where the capacity, deflection criteria, materials, and depth are shown as equal to that referenced herein. All grating is ASTM A588 steel and shall be hot-dip galvanized in accordance with ASTM A123 requirements. Hardware shall be hot-dip galvanized in accordance with ASTM A153.

Open Steel Grating, where indicated on the plans, shall consist of 127mm 4-way (Standard) grating with 191mm main bar spacing and 2.2kg main bar weight.

Half-filled Steel Bridge Deck Grating, where indicated on the plans, shall consist of 127mm 4-way half-depth grating with 191mm main bar spacing.

Filled Steel Bridge Deck Grating, where indicated on the plans, shall consist of 127mm 4-way full-depth grating with 191mm main bar spacing.

Reinforcement required for Half-filled and Filled steel grating shall be Grade 400, galvanized, and shall be a size as required by the grating manufacturer.

Concrete fill shall be min. 24,100kPa design mix with maximum 19mm aggregate.

**CONSTRUCTION DETAILS**

Shop drawings shall be furnished and described in Subsection 202.5 through 202.10 of the New York State Steel Construction Manual. Shop drawings shall be submitted to the ENGINEER for approval prior to any fabrication or installation.

Steel grating shall be fastened to stringers and floor beams by bolting. Welding will not be permitted. Bolting shall be with 16mm H.S. A325 bolts at a spacing shown on the plans or as recommended by the grating manufacturer, whichever results in the smallest distance between bolts.

**METHOD OF MEASUREMENT**

Measurement will be made as the number of square meters of grating, reinforcement and concrete furnished and placed.

**ITEM 596.15xxM      BRIDGE DECK GRATING**

**BASIS OF PAYMENT**

The unit price bid per square meter shall include the cost of labor, equipment and material required to furnish and install the steel grating, including reinforcement and concrete fill where required.

Payment will be made under:

<b><u>Item No.</u></b>	<b><u>Item</u></b>	<b><u>Pay Unit</u></b>
596.1500M	127mm Open Steel Grating for Bridge Decks	SM
596.1501M	127mm Filled Steel Bridge Deck Grating	SM
596.1502M	127mm Half-Filled Steel Bridge Deck Grating	SM